

CLAIMS

What is claimed is:

1. An axle assembly comprising:
an axle housing comprising a first plate spaced away from a second plate to define a first and second segment; and
a torque plate fixed to each of said first and second segments along a portion of said axle housing mounted at least partially between said first and second plates.
2. The assembly of claim 1, wherein said torque plate comprises an opening for mounting of said brake assembly.
3. The assembly of claim 1, wherein said torque plate comprises at least one extending flange, said flange comprising mounting openings for said brake assembly.
4. The assembly recited in claim 1, further comprising a spindle assembly fixed to each of said first and second segments of said axle housing.
5. The assembly recited in claim 4, wherein said spindle assembly comprises a spindle and a spindle housing and said torque plate includes an opening through which said spindle extends.
6. The assembly recited in claim 5, wherein said axle housing comprises a partial opening along a bottom portion adjacent each of said first and second segments for receiving a portion of said spindle housing.
7. The assembly recited in claim 6, wherein said spindle housing is welded to a surface of said axle housing transverse to said first and second plates.

8. The assembly recited in claim 6, wherein said housing comprises front and back plates spaced apart a distance defining an opening corresponding to a width of said spindle housing.

9. The assembly of claim 1, further comprising a brake assembly mounted to each of said torque plates.

10. A method of fabricating a non-driven axle assembly comprising the steps of:

a.) forming a substantially rectangular housing comprising a first plate spaced apart from a second plate to define open first and second segments and at least a partially open bottom;

b.) welding a torque plate transverse to said first and second plates over each of said open segments; and

c.) mounting a brake assembly to each of said torque plates.

11. The method of claim 10, further comprising the step of installing a spindle assembly to each of said first and second segments.

12. The method of claim 11, wherein said spindle assembly comprises a spindle and a spindle housing, and said torque plate defines an opening for said spindle, said method further comprising the step of inserting said spindle through said opening in said torque plate and fixing said spindle housing to said housing.

13. The method of claim 10, wherein said torque plate includes at least one mounting flange, and said step c. further comprises fixing said brake assembly to said mounting flange.

14. The method of claim 10, wherein step a.) comprises forming said housing as an inverted U-shape such that said first and second segments are disposed adjacent an axis of rotation, and a center portion of said housing is spaced a distance away from said axis of rotation.

15. A method of fabricating a non-driven axle assembly comprising the steps of:

a) constructing an axle housing having first and second segments, and a bottom surface, said first and second segments defining an opening, and at least a portion of said bottom surface defining an opening;

b) fixing torque plates adjacent first and second segments of an axle housing;

c.) fitting at least a portion of said tubular housing into said opening defined by said bottom surface of said axle housing;

d.) attaching said torque plates to said first and second segments of said axle housing; and

e.) removing a portion of said tubular housing between said first and second segments of said axle housing.

16. The method of claim 15, wherein a cross-section of said axle housing is substantially rectangular.

17. The method of claim 15, wherein said tubular axle includes spindles disposed at each of said first and second segments.

18. The method of claim 15, wherein a remaining portion of said axle housing comprises a portion of said bottom surface of said axle housing.

19. The method of claim 15, wherein said torque plates closes off said opening at said first and second segments of said axle housing.